## **SERIAL NO.** 10/590,040 **FILED:** November 21, 2006

## IN THE CLAIMS:

This listing of claims replaces all prior versions of claims.

Please amend claims 1, 9-12, and 20-21.

Please cancel claims 2-8 and 19.

Please add claims 30-35.

1. (Currently amended) A T-cell immune response inhibitor that comprises:

a targeted nucleic acid vaccine encoding a targeted antigen and the [[a]] targeted antigen that is encoded by said nucleic acid vaccine encoding a targeted antigen; or

a targeted nucleic acid vaccine an active polypeptide from a targeted antigen that is encoded by said nucleic acid vaccine; or

a targeted pathogen nucleic acid vaccine and an inactivated targeted pathogen, wherein ratio of the nucleic acid vaccine to the polypeptide is selected from the group consisting of 5:1 (w/w), from 2:1 to 10:1(w/w), from 1:5 to 5:1(w/w), from 1:2 to 1:10(w/w) and is effective to inhibit a T-cell immune response.

- 2-8. (Canceled).
- 9. (Currently Amended) [A]] <u>The</u> T-cell immune response inhibitor according to claim 1 further comprising an immunological adjuvant.
- 10. (Currently Amended) [A]] <u>The</u> T-cell immune response inhibitor according to claim 1 wherein said nucleic acid vaccine is a eukaryote cell expression vector comprising a <u>nucleic acid sequence gene</u> encoding <u>the</u> [[a]] targeted antigen.
- 11. (Currently Amended) [A]] <u>The T-cell immune response inhibitor according to Claim 10</u>, wherein the <u>nucleic acid sequence gene</u> encoding the targeted antigen is linked to a promoter selected from the group consisting of: RSV, CMV and SV40 viral promoters.

**SERIAL NO.** 10/590,040 **FILED:** November 21, 2006

- 12. (Currently Amended) [A]] <u>The</u> T-cell immune response inhibitor according to Claim 10, wherein said eukaryote cell expression vector is a plasmid, virus, <del>bacteriophage</del>, or an expression vector formed of plasmid DNA and a chromosomal DNA fragment.
- 13-19. (Canceled)
- 20. (Currently Amended) [A]] <u>The</u> T-cell immune response inhibitor according to claim 10 wherein said nucleic acid vaccine is a plasmid.
- 21. (Currently Amended) [A]] <u>The</u> T-cell immune response inhibitor according to claim 1 wherein said targeted antigen is a pathogen antigen.
- 22. (Withdrawn-currently amended) A method of inhibiting a T-cell immune response against a targeted antigen that comprises: administering to an individual <u>a composition of claim 1</u>, a targeted nucleic acid vaccine and a targeted antigen that is encoded by said nucleic acid vaccine; or a targeted nucleic acid vaccine and an active polypeptide from a targeted antigen that is encoded by said nucleic acid vaccine; or a targeted pathogen nucleic acid vaccine and an inactivated targeted pathogen.
- 23. (Withdrawn) A method of treating an disease or condition associated with an autoimmune reaction comprising inhibiting a T-cell immune response by a method according to claim 22.
- 24. (Withdrawn) The method of claim 23 wherein the disease or condition is selected from the group consisting of: systemic lupus erythematosus, rheumatoid arthritis, chronic lymphatic thyroiditis, toxic goiter, polyarteritis nodosa, insulin-dependent diabetes mellitus, myasthenia gravis, chronic active hepatitis, chronic ulcerative colitis, pernicious anemia with chronic atrophic gastritis, allergic encephalomyelitis, Goodpasture's syndrome, scleroderma, common

pemphigus, pemphigoid, adrenocortical insufficiency, primary biliary cirrhosis of the liver, multiple sclerosis, and acute polyneuroradiculitis.

- 25. (Withdrawn) The method of claim 23 wherein the disease or condition is an autoimmune rejection response in organ transplants.
- 26. (Withdrawn) A method of treating allergic reactions comprising inhibiting a T-cell immune response by a method according to claim 22.
- 27. (Withdrawn) The method of claim 26 wherein the allergic reactions is to an allergen selected from the group consisting of dust mites, fleas, cockroaches, animal hr, pollen, mold, and bacteria.
- 28. (Withdrawn) The method of claim 26 wherein the allergic reactions is a virus- and tobacco smoke-induced skin and respiratory tract injuries.
- 29. (Withdrawn) The method of claim 26 wherein the allergic reactions is an allergic response or immunity overstimulation-induced allergic immune disorders selected from the group consisting of: contact dermatitis, urticaria, allergic rhinitis, asthma, nephritis, hyperthyroidism, and viral hepatitis immuno-hypersensitivity.
- 30. (New) The inhibitor of claim 1 wherein said ratio is in the range of 2:1 to 10:1(w/w).
- 31. (New) The inhibitor of claim 1 wherein said ratio is in the range of 1:5 to 5:1(w/w)
- 32. (New) The inhibitor of claim 1 wherein said ratio is in the range of 1:2 to 1:10(w/w).
- 33. (New) The inhibitor of claim 1 wherein said ratio is 5:1 (w/w).

## DOCKET NO. 133232.201 PATENT

**SERIAL NO.** 10/590,040 **FILED:** November 21, 2006

- 34. (New) The inhibitor of claim 1 wherein said ratio is 2:1 (w/w).
- 35. (New) The inhibitor of claim 1 wherein said ratio is 1:2 (w/w).